

Notice of Allowability

Application No.

10/667,518

Examiner

Rodney Amadiz

Applicant(s)

NOGUCHI ET AL.

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's Remarks sent September 26, 2006.
2. ☒ The allowed claim(s) is/are 2-4 and 6-14 (renumbered 1-12).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 11/13/06
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Arthur Steiner on November 13, 2006.

The application has been amended as follows:

Claim 3, line 11 has been amended to read as follows:

—wherein each of the different circuit elements is one corresponding **only** to a final-stage circuit—

Claim 6, line 13 (last line on page 3) has been amended to read as follows:

—output path between the final ~~state~~ **stage** of the circuit block and the output terminal, and wherein any—

Authorization for this examiner's amendment was given in a telephone interview with Arthur Steiner on November 20, 2006.

The application has been amended as follows:

Claim 11, has been amended to read as follows:

—A ~~signal transmission circuit~~ **display apparatus** according to Claim 6, wherein the buffer elements ~~might be~~ **are** disposed in a dispersed manner so that the target signal ~~might obtains~~ a desired output characteristic by passing through both the buffer

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elements provided in the plurality of signal paths and the buffer element provided in the output path.—

Allowable Subject Matter

1. Claims 2-4, and 6-14 are allowed.
2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Examiner cites the following references as pertinent to the disclosure due to their relevance with bidirectional shift registers.

Nakagaki et al.	U.S. Patent 6,104,370
Murade et al.	U.S. Patent 6,377,235
Hanari et al.	U.S. Patent 6,437,775
Murade et al.	U.S. Patent 6,680,721
Fujita et al.	U.S. Patent 6,784,880
Orlsaka et al.	U.S. Patent 6,839,046
Tobita et al.	U.S. Patent 7,006,067
Kubota et al.	U.S. Patent 7,042,433

3. The following is an examiner's statement of reasons for allowance: As to Claim 3, the above-cited references have failed to teach or suggest, either alone or in combination the following: "each of the different circuit elements is one corresponding to a final-stage circuit element in a block which sequentially drives a plurality of pixel circuits, when the pixel circuits are driven in a forward or reverse direction, and the

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operational mode is switched corresponding to the forward or reverse direction of driving the pixel circuits.”

As to Claim 6, the above-cited references have failed to teach or suggest, either alone or in combination the following: “the output path is formed by connecting output lines of the switching elements, there is disposed a buffer element in the output path between the final stage of the circuit block and the output terminal”. Furthermore, see Applicant's Remarks: Page 7, first paragraph.

As to Claims 14, the above-cited references have failed to teach or suggest, either alone or in combination the following: “at least one of the plurality of buffer element is disposed between the final stage of the circuit block and the connector pin outputting a checking signal to be used for inspecting an operation stat of the signal transmission circuit.” Furthermore, see Applicant's Remarks: Page 7, first paragraph.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

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Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney Amadiz whose telephone number is (571) 272-7762. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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11/20/06
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